EXPLANATION

- Magnetic contours with flight-line indications (shaded in black) show areas where ore minerals are likely.
- Magnetic contours without flight-line indications show areas where ore minerals are unlikely.
- Measured intensity in microgauss.

The aeromagnetic map is one of a series of county maps based on a state-wide aeromagnetic survey of Indiana carried out during the period September to November 1948 by the U.S. Geological Survey in cooperation with the Division of Geology of the Indiana Department of Conservation.

The survey was designed to obtain information on the configuration of the possible basement rocks, or variations in their composition, and on their relation to structures in the overlying sedimentary rocks. The selection of survey routes and the establishment of flight lines were based on the magnetic expressions of large-scale features, such as the regional dips of the surfaces of the basement rocks. It is expected that this information will aid in the search for geological reservoirs favorable to the accumulation of petroleum.

The survey was made by a continuously recording AVM-14 aeromagnetic integrator to a base line of 122 feet. North-south traverse lines were flown approximately 1,500 feet apart. Magnetic surveys were conducted at 300-foot intervals, and the flight path of the aircraft was recorded by a continuously reading airborne compass. A gyro-stabilized vertical sight was used to increase positional accuracy.

TOTAL INTENSITY AEROMAGNETIC MAP OF PIKE COUNTY, INDIANA

Relative to Arbitrary Datum

1950